Penstemon

#67

'BANDERA' ROCKY MOUNTAIN PENSTEMON

LONG-LIVED PERENNIAL FLOWING PLANT

SEMI-EVERGREEN

NATIVE ORNAMENTAL

IDEAL FOR BEAUTIFICATION AND SOIL STABILIZATION

ESTABLISHED BY SEED OR PLANT SPRIGS

'BANDERA' ROCKY MOUNTAIN PENSTEMON[1/]

'Bandera' Rocky Mountain penstemon (*Penstemon strictus Benth.*) is an herbaceous, long-lived, perennial flowering plant that is useful for beautification, soil stabilization, and ornamental landscaping.

This variety was jointly released by the Agricultural Experiment Stations of New Mexico State University and Colorado State University, the New Mexico State Highway Department, and the USDA Soil Conservation Service.

ORIGIN AND DESCRIPTION

The original collection of Bandera was made in the ponderosa pine zone northwest of Mountainair, New Mexico. The natural range of Rocky Mountain penstemon is central and northern New Mexico, Colorado, southern Wyoming, Utah, and northeastern Arizona at elevations from 6,000 to 11,000 feet (1800 to 3400 m). It is found on rocky to sandy loam soils.

Bandera has an abundance of dark, shiny, green leaves. The lower leaves form a basal rosette. Some of the leaves turn reddish purple in winter. The remainder stay green throughout the year. Under cultivation the basal leaves may be as long as 6 inches (15 cm) and upper leaves 4 inches (10 cm). The stems are coarse and vary from 8 to 28 inches (20 to 70 cm) in height. The abundant flowers range from blue to violet in color. The flowers bloom between mid-May and mid-June at the Plant Materials Center, Los Lunas, New Mexico, where the initial testing was done. The basal diameter of individual plants averages 20 inches (50 em) but may be as large as 30 inches (75 cm) with optimum amounts of water and soil nutrients.

1/ Funds for preparing this publication were provided by the USDA Surface Environment and Mining Program. Additional information on this variety may be obtained from the Plant Materials Center, 1036 Miller Street, SW, Los Lunas, NM 87031

ESTABLISHMENT AND USE

This variety can be established from seed and from plant sprigs obtained by dividing the base of older plants. Each sprig needs some roots and a few leaves for best results. In moist soil basal portions of the stems layer (grow roots) readily in most soil. Seedling vigor is good in plants established from seed. A seeding rate of 5 pounds per acre (6 kg/ha) pure-live-seed is recommended.

The beautiful flowers and evergreen basal rosette make this plant attractive for ornamental plantings. Its fibrous root system and layering habit make Bandera valuable for soil stabilization.

DISUSES AND INSECTS

Fusarium wilt reduced seed production after two years on a flood irrigated sandy loam soil. This disease has not been observed on plants growing on clay or clay loam soil. Low vigor plants were occasionally attacked by scale insects.

SEED PRODUCTION

Bandera produced an average of 152 pounds per acre (170 kg/ha) of pure-live-seed for four years at the Los Lunas Plant Materials Center. The first seed crop is produced during the second growing season. The seed matures in late July or early August and can be direct combined. It is relatively easy to clean on an air-screen cleaner.

TIPS ON SEED PRODUCTION

1. Seeding rate: 3 to 5 pounds of pure-live-seed per acre (3 to 6 kg/ha).

2. Seeding depth: 0.25 to 0.5 inch (6 to 12 mm).

3. Row spacing: 30 to 40 inches (75 to 100 cm) for ease of cultivation.

4. Planting date: Fall or early winter. The soil must be kept moist after the seed is planted in order for natural stratification (moist cold treatment) to occur.

5. Water: Supplemental water from overhead sprinklers or surface irrigation is necessary at some locations.

6. Fertilizer: Determine by a soil test or experience, but under irrigation, 40 pounds of actual nitrogen per acre (45 kg/ha) and 80 pounds of phosphorus (P_2O_5) per acre (90 kg/ha) may be used.

SEED SOURCE

Limited quantities of foundation Bandera Rocky Mountain penstemon seed are available to growers through Crop Improvement Associations and Natural Resource or Soil and Water Conservation Districts. Seed is expected to be commercially available by the fall of 1976.